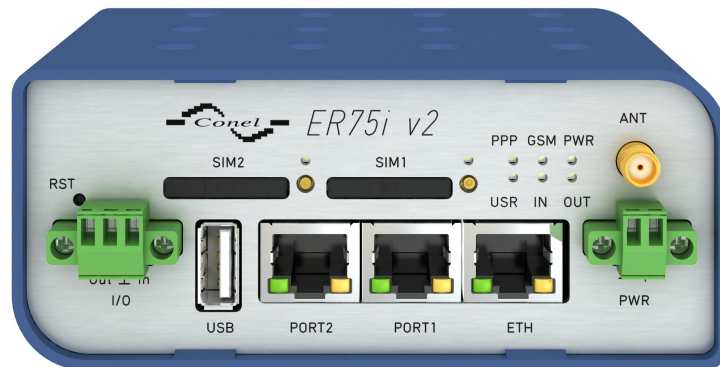


User Module

# TCP SYN Keep-Alive

APPLICATION NOTE



**ADVANTECH**

## Used symbols



*Danger* – Information regarding user safety or potential damage to the router.



*Attention* – Problems that may arise in specific situations.



*Information or notice* – Useful tips or information of special interest.



*Example* – example of function, command or script.



# Contents

<b>1</b>	<b>Description of user module</b>	<b>1</b>
<b>2</b>	<b>Web interface</b>	<b>2</b>
2.1	Overview . . . . .	2
2.2	Global . . . . .	2
<b>3</b>	<b>Recommended literature</b>	<b>3</b>

## List of Figures

1	Web interface . . . . .	1
2	Overview . . . . .	2
3	Global . . . . .	2

## List of Tables

1	Description of items in the configuration form . . . . .	2
---	--	---

# 1. Description of user module



User module *TCP SYN Keep-Alive* is not contained in the standard router firmware. Uploading of this user module is described in the Configuration manual (see [1, 2]).



The user module is v2 and v3 router platforms compatible.

Using this module it is possible to check the functionality of the TCP connection with a defined IP address (on a specified TCP port). Establishing of the connection is carried out regularly at a specified interval. Failed attempts to establish a TCP connection are logged and at the moment when the preset limit is exceeded WAN connection is restarted.

For configuration *TCP SYN Keep-Alive* user module is available web interface, which is invoked by pressing the module name on the *User modules* page of the router web interface. The left part of the web interface contains the menu with pages for monitoring (*Status*), configuration (*Configuration*) and customization (*Customization*) of the module. *Customization* block contains only the *Return* item, which switches this web interface to the interface of the Conel router.

## TCP SYN Keep-Alive

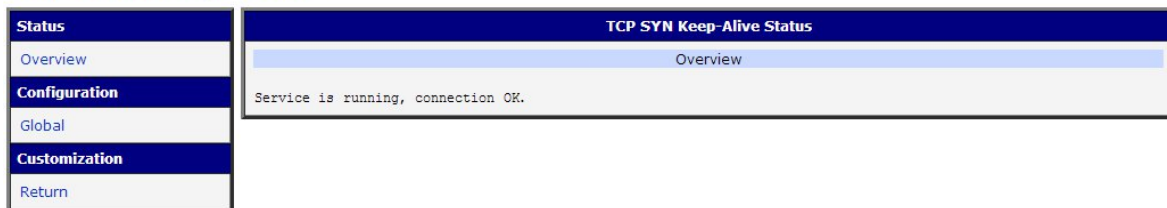


Figure 1: Web interface

## 2. Web interface

### 2.1 Overview

In the section with pages for monitoring the status of the router (*Status*) is available only *Overview* item which displays information about the activities of this user module.

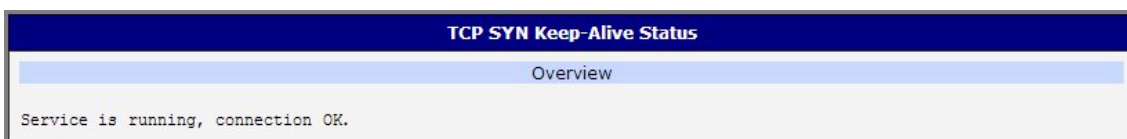


Figure 2: Overview

### 2.2 Global

The actual configuration of *TCP SYN Keep-Alive* user module is performed via the form named *Global*. The first item in the form – *Enable TCP SYN Keep-Alive service* – is used to activate this user module. Then it is necessary to define the following items:

Item	Description
IP address	IP address on which TCP connection is checked
TCP port	Port number used for communication
Period	After this time, further check of TCP connection is done (in minutes)
Max. failure	Maximum number of fails after which WAN connection is restarted

Table 1: Description of items in the configuration form

All changes will be applied after pressing the *Apply* button.

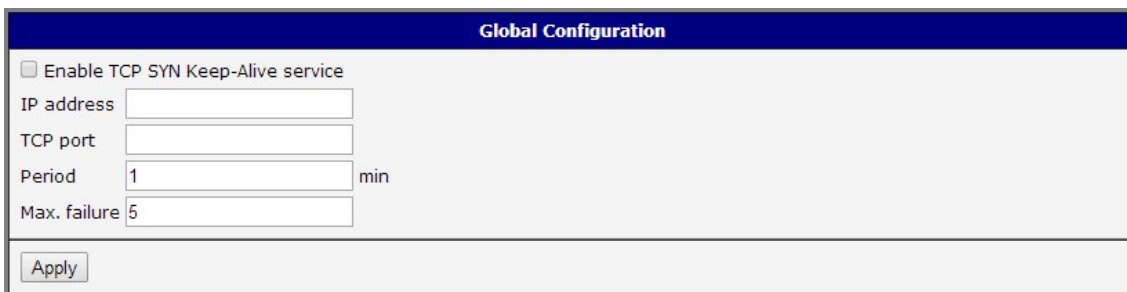


Figure 3: Global

### 3. Recommended literature

- [1] Advantech B+B SmartWorx: **v2 Routers Configuration Manual** (MAN-0021-EN)
- [2] Advantech B+B SmartWorx: **SmartFlex Configuration Manual** (MAN-0023-EN)
- [3] Advantech B+B SmartWorx: **SmartMotion Configuration Manual** (MAN-0024-EN)
- [4] Advantech B+B SmartWorx: **SmartStart Configuration Manual** (MAN-0022-EN)
- [5] Advantech B+B SmartWorx: **ICR-3200 Configuration Manual** (MAN-0042-EN)



Product related documents can be obtained on *Engineering Portal* at <https://ep.advantech-bb.cz/> address.